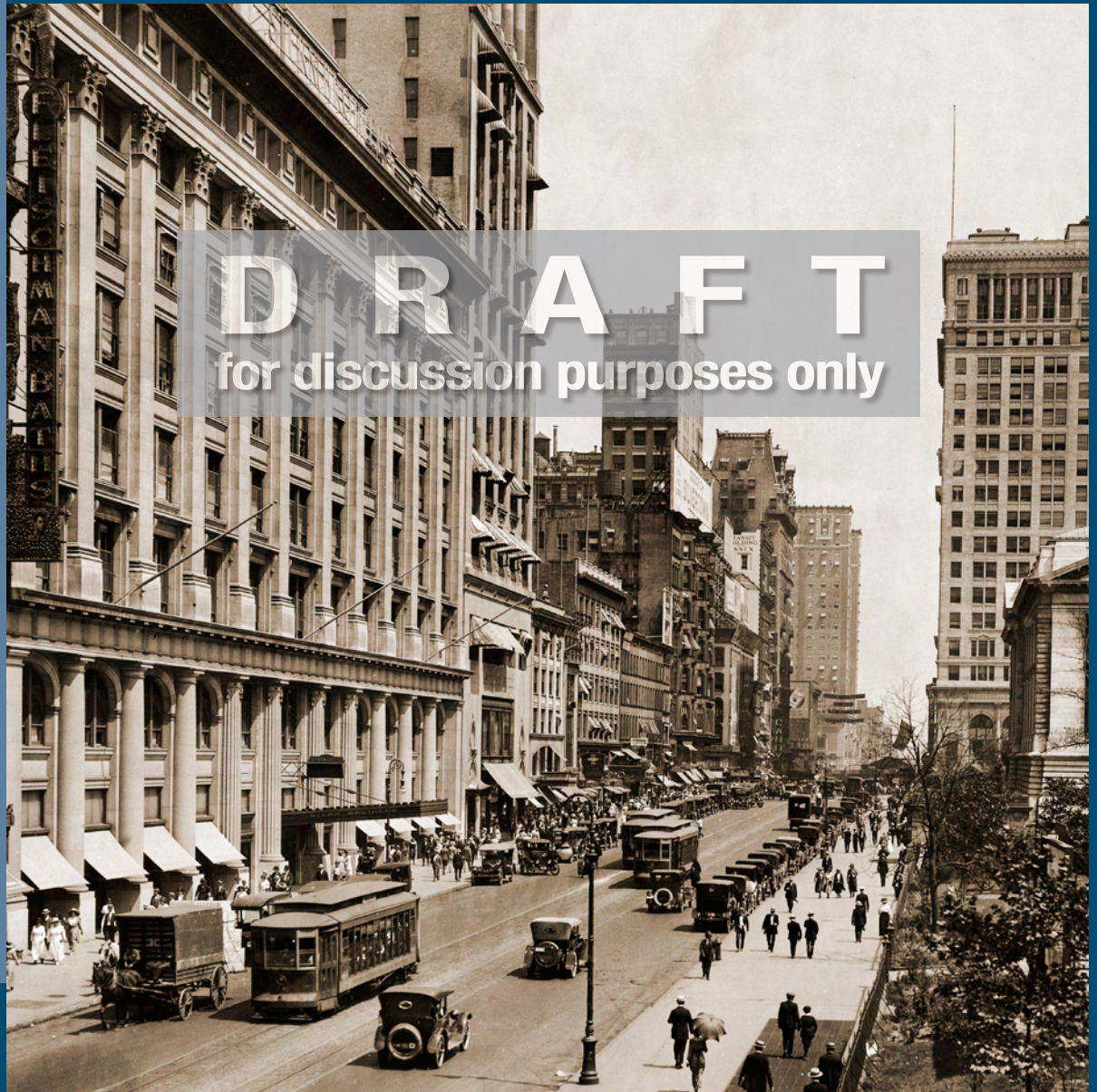


# 11

History-Social  
Science Standard  
11.5.7.



## Supporting Materials California Education and the Environment Initiative



# Mass Production, Marketing, and Consumption in the Roaring Twenties

# DRAFT

for discussion purposes only

## California Education and the Environment Initiative

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Name: \_\_\_\_\_

### Part 1

**Multiple Choice:** Select the best answer and circle the correct letter. (2 points each)

1. Which of the following was not a result of mass production techniques in the 1920s?
  - a. extraction of natural resources
  - b. development of the assembly line
  - c. consumption of manufactured goods
  - d. increased costs of automobiles
  
2. Which of the following was a pattern that repeated during the 1920s?
  - a. products consumed; products produced; demand for more products
  - b. products produced; products consumed; demand for more products
  - c. byproducts and waste; demand for more products; products consumed
  - d. demand for more products; products consumed; investments made
  
3. A beneficial byproduct made from coal tar is
  - a. automobiles
  - b. gasoline
  - c. plastics
  - d. telephones
  
4. In the 1920s, the rate of consumption decreased for which of the following manufactured goods?
  - a. cameras
  - b. lightbulbs
  - c. vacuum cleaners
  - d. weapons
  
5. The development of plastic shopping bags is an example of
  - a. mass consumption
  - b. mass production
  - c. new technology
  - d. marketing
  
6. Which of the following is a negative effect of mass production and consumption on natural systems?
  - a. bioplastic bags
  - b. Pacific Garbage Patch
  - c. polyethylene
  - d. recycling

## Mass Production, Marketing, and Consumption

Traditional Unit Assessment Master | page 2 of 5

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Name: \_\_\_\_\_

7. Which of the following is remediation due to the detrimental effect of mass production and consumption on natural systems?
  - a. white pollution
  - b. North Pacific currents
  - c. plastic bag bans
  - d. sanitary landfills
8. In the 1920s, affordable cars and new roads had a direct influence on the American landscape through
  - a. 40-hour workweeks
  - b. the expansion of suburbs
  - c. the purchase of home appliances
  - d. the use of assembly lines
9. Which of the following statements best describes an indirect influence of growing cities on the American landscape and its natural systems?
  - a. Landfills were made to dispose of the increased waste from consumption.
  - b. A prosperous decade provided stable jobs, letting many people increase their leisure time.
  - c. Mass production led to increased uses of natural resources such as oil and steel.
  - d. Electricity replaced coal and water as fuel for manufacturing.
10. Building roads, restaurants, and filling stations were a result of which innovation used in the 1920s?
  - a. assembly line
  - b. marketing
  - c. landfills
  - d. steam engines
11. Which of the following is an example of direct effects of new technologies on natural systems?
  - a. building highways for cars
  - b. animals ingesting plastics
  - c. pumping oil for fuel for cars
  - d. sanitary landfills for plastic bags
12. Which of the following is an example of indirect effects of new technologies on natural systems?
  - a. conversion of steam to electricity
  - b. electrical lighting in homes
  - c. mining iron ore to make cars
  - d. roadside filling stations

Name: \_\_\_\_\_

13. Which of the following statements best describes the effects of many new home appliances introduced in the 1920s on natural systems?
- a. Women found more leisure time due to modern conveniences.
  - b. Time-saving appliances such as the washer decreased water pollution.
  - c. More homes needed energy and were wired for electricity.
  - d. Renewable natural resources provided raw materials for production.
14. What stimulated the demand for more mass-produced goods?
- a. byproducts
  - b. investments
  - c. marketing
  - d. waste
15. Which invention led to unintended consequences in dump sites like the one in Tracy, California?
- a. automobile
  - b. hair dryers
  - c. plastics
  - d. telephones

Part 2

Short Answer: Answer the following questions. (4 points each)

16. What caused the rise of mass production and mass consumption in the 1920s?

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Name: \_\_\_\_\_

17. What was the relationship between mass production, natural resources, consumption, and byproducts in the 1920s?

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18. What is an example of a direct effect of new technologies on natural systems?

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Name: \_\_\_\_\_

19. What is an example of an indirect effect of new technologies on natural systems?

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20. How did growing cities in the 1920s influence the American landscape and the associated natural systems?

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## Alternative Unit Assessment Master | page 1 of 2

**Directions:**

- ## Public Service Announcement

[illegible]



## Alternative Unit Assessment Master | page 2 of 2

[illegible]

## Key Unit Vocabulary

Lesson 1 Activity Master | page 1 of 2

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**Advertising:** The activity of attracting public attention to a product or business, as by paid announcements in the print, broadcast, or electronic media.

**American landscape:** The features of the land, cultural geography, and human social systems of the United States.

**Appliance:** A device or instrument designed to perform a specific function, especially a household machines, such as a refrigerator.

**Assembly line:** An arrangement of workers, machines, and equipment placed so that a product being assembled passes consecutively from operation to operation until completed.

**Biodegradable:** Objects, materials, and chemicals that can be decomposed by bacteria and fungi.

**Byproduct:** Something, such as waste materials or chemicals, produced when something else is manufactured or consumed.

**Consume:** To use economic and ecosystem goods and services.

**Consumption:** The act or process of obtaining and using a product or resource, whether produced by a natural system or a human social system.

**Credit:** An agreement through which a borrower receives something of value, such as money, with the promise to repay the lender.

**Cycle:** A regularly repeated event or sequence of events that occur over time, such as the water cycle.

**Demand:** (noun) Quantity of a good or service that consumers are interested in purchasing from producers and suppliers at a given price.

**Human social systems:** The functions, processes, and interactions among individuals, human communities, and societies including political, social, cultural, economic, and legal systems.

**Incentive:** A policy, action, or reward that motivates or inspires a person or entity to take a certain action.

**Innovation:** The act or process of creating a new way to doing things, or the resulting product or process.

**Investment:** An asset purchased or held with the intention to profit from an increased value when the asset is sold.

**Landfill:** A solid waste disposal site where garbage is buried between layers of dirt.

**Landscape:** The visible features of an area of land or an image depicting an expanse of scenery.

**Lifestyle:** A way of life or approach to living that reflects the attitudes and values of a person or group.

**Marketing:** The process of promoting goods or services for sale.

**Mass consumption:** The act or process of consuming a large quantity of a product or resource.

**Mass production:** The act or process of producing a large quantity of goods.

**Natural system:** The interacting components, processes, and cycles within an environment, as well as the interactions among organisms and their environment.

**Plastic:** Any of various organic materials produced by polymerization that are capable of being molded, extruded, cast into various shapes and films, or drawn into filaments to be used as textile fibers.

**Processed food:** Food changed from its natural state for safety and convenience that is canned, frozen, refrigerated, or dehydrated and aseptically processed.

## Key Unit Vocabulary

Lesson 1 Activity Master | page 2 of 2

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**Remediation:** Action to reduce, isolate, or remove contamination from an environment, or to otherwise resolve an existing problem.

**Suburb:** A community on the outskirts a city that typically includes both residential and commercial areas.

**Technology:** The application of engineering and science to resolve a problem, or the resulting product or process.

**Toxin:** A substance that can cause disease or damage to humans and other organisms.

**Waste:** Materials, chemicals, and products that are regarded as having no use or value, often referred to as garbage or trash.



# California's Waste Tire Problem

## Part I



In August 1998, more than seven million waste tires caught fire in an illegal dump outside of Tracy, California. Dense black smoke plumed to heights of 6,500 feet, carrying with it particulate matter, carbon monoxide, nitrogen oxides, heavy metals, and other toxic substances. The piles had reached as high as 50 feet and spread out over 52 acres among used oil filters, abandoned vehicles, and other refuse.

The fire started when the tire dump's owner was mowing nearby grassland. When sparks from his tractor engine ignited the grassland, flames leaped to the piles of tires. Emergency response teams decided not to extinguish the fire. They feared that water used to dampen the flames would create hazardous runoff, which could threaten groundwater. The Tracy Tire Fire burned for more than two years before firefighters finally extinguished it in December 2000. It took over five years to remove partially burned tires, debris, and more than 50,000 cubic yards of contaminated waste. Clean-up costs totaled \$18 million.

The Tracy Tire Fire was an environmental disaster resulting from the millions of used tires accumulating in California since the 1920s. Tires are not classified as hazardous waste, however, once ignited,



*Burning tires*

they create dense clouds of hazardous pollutants. Because tire fires are so difficult to extinguish can be released into the air for months or years. Because of their hollow shape, about 75percent of a tire is empty space. This space holds a large oxygen supply and even funnels air drafts throughout tire piles to “fan” a fire. Tire fires burn at very high temperatures, this forces pyrolytic oil, a tar-like substance, out of the rubber. The rubber in a tire contains approximately two gallons of oil, which, if released, can contaminate soil and water. Hazardous waste from a tire fire can also contaminate surrounding areas with arsenic, lead, and numerous other toxic compounds. This toxic waste must be contained so that it does not leach into groundwater or nearby surface water. In many cases, the contaminated soil must be removed and transported to a hazardous waste landfill.

California has more registered vehicles than any other state. A byproduct of this “car culture” is use of a staggering number of tires. Californians generate 40.8 million waste tires annually, some of which could be reused. Another 1.5 million old tires are held in illegal stockpiles where there provide a habitat for rodents and other pests, such as



*Discarded tires*

mosquitoes breed in rainwater that collects in the used tires. Tires, unless processed may not be disposed of in municipal landfills, where they can rise to the top of the waste pile because of their relatively light weight. Whether in landfills or illegal stockpiles waste tires create a fire hazard. Illegal dumping of waste tires is a problem in many parts of the country, and California is no exception.

People often travel to impoverished areas such as inner-city alleyways and rural areas to dump used tires. Some people dump their old tires because they simply don't know

about the hazards they are creating. Others dump the old tires because they don't care, as long as the tires gone from their backyards. Major environmental disaster like the Tracy Tire Fire remind us of just how dangerous it is to stockpile waste tires.

Californians will consume approximately 200 million tires the next five years. This means we will have 200 million additional waste tires to manage. As our population grows and more people drive on highways every year, an important question remains, **What should we do with all of these old tires?**



## Part 2

The California Integrated Waste Management Board (CIWMB) is one of six agencies under the umbrella of the California Environmental Protection Agency (Cal/EPA). The CIWMB is responsible for the collection, transportation, processing, recycling, or disposal of waste materials in California. Managing waste tires is one of CIWMB's jobs. This State entity has an active role in reducing landfill waste and stockpiling, in recycling material from used tires, and in protecting public health and the environment.

Each year, the CIWMB successfully diverts more than 30 million used tires from stockpiles or landfills. The CIWMB provides money to local governments to recover waste tires from the public. It also pays for the development of public education materials to raise public awareness about the problem of waste tires in California.

Once waste tires are collected, they can be reused, retreaded, or recycled. If tires still have a legal tread depth, they can be reused. Each year about two million used tires are sold and reused. Tires can be retreaded if they are too worn down for reuse. California has more than 50 retread plants, which sell million of retreaded tires each year.



*Crumb rubber*

One of the main ways the CIWMB keeps tire waste out of landfills is by developing markets for recycled tire materials. It funds research projects to find new uses for tire products as well as provides economic incentives to local governments and businesses to use and manufacture recycled-tire products. One such product is crumb rubber, which can be used for playground turf, speed bumps, carpet tiles, mats, sound barriers, and molded rubber

products. Rubberized asphalt can be used to repave roads. It is more durable and smoother than conventional asphalt and helps reduce traffic noise. Tire shreds have been used to build highway retaining walls as well as dampen the sound in light-rail systems. Tires are also burned for fuel, most of which is used in the cement manufacturing industry. The public can support such new uses of old tires by buying tire-derived products such as playground equipment,



roof shingles, and new tires made from recycled rubber.

The CIWMB also plays a major role in the cleanup and remediation of tire dumps as well as in the tracking and law enforcement actions needed to prevent such dumps. The CIWMB began remediating old tire piles in 1994, and it has removed over 771,128 tons of illegal waste tires and contaminated trash from 60 sites. Cleanup involves stabilizing tire piles, removing and transporting tires to a facility where they can be recycled,

and removing any leftover toxic wastes. The total cost of site remediation has been \$40 million. Most of this money was spent on major tire fires such as the one in Tracy.

The CIWMB works with local law enforcement and highway patrol agencies to stop illegal tire dumping, which is concentrated in U.S. border regions. Some of the tools they use to monitor illegal tire dumping include satellite technology and motion-activated surveillance. The Waste and

Used Tire Hauler and Manifest Program requires waste haulers to register and record each tire transaction. This tracking system helps to monitor the flow of waste in the state.

When Cal/EPA, local governments, law enforcement agencies, private businesses, and an educated public work together, tires can be reused, retreaded, or recycled to make many useful products. Used tires are not just a waste product to be discarded. Instead, when handled properly, they can become a resource.



*Illegally dumped tires*

## Lesson 1 Activity Master

Write a 200–250 word response to the questions below. Use information from **California Connections: California's Waste Tire Problem** and discussions, as well as your own ideas to describe the direct and indirect effects on natural systems of the manufacture and use of automobile tires. In your response, provide examples of how can people minimize the effects of tires on the environment. (20 points, 5 points for example and description)

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.



## Moving Californians





## Car Tire Dump





## Tracy Tire Fire





## After the Tracy Tire Fire





## Rise of Mass Production and Mass Consumption

Lesson 2 Activity Master | page 1 of 2

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Name: \_\_\_\_\_

**Directions:** Record the information in the correct boxes.

### Science and Events

List at least three events or advances in science and technology prior to the 1920s that influenced mass production. (1 point each)

### Natural Environment

List at least three examples of resources extracted from the natural environment to support mass production. (1 point each)

### New Products Produced

Identify at least five examples of new products produced in the 1920s. (1 point each)

### New Products Consumed

Describe how mass consumption affected new product production, science, and events. (2 points)

Describe how mass consumption affected the natural environment. (2 points)

## Rise of Mass Production and Mass Consumption

Lesson 2 Activity Master | page 2 of 2

Name: \_\_\_\_\_

### Science and Events

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### Natural Environment

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### New Products Produced

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### New Products Consumed

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## Mass-produced Inventions Chart

Lesson 2 Activity Master | page 1 of 3

Name: \_\_\_\_\_

### Day 1

**Directions:** Complete the row for the automobile with the class.

### Day 2

**Directions:** Complete the row for your group's invention. Complete the remaining rows as you take notes from other groups. (20 points)

Mass-produced Invention	Natural Resources Required for Production in 1920s	Intended Consequences	Unintended Consequences (including byproducts)	Effects on Natural Systems (good, bad, neutral)
Automobile				
Alarm Clock				
Camera				

## Mass-produced Inventions Chart

Lesson 2 Activity Master | page 2 of 3

Name: \_\_\_\_\_

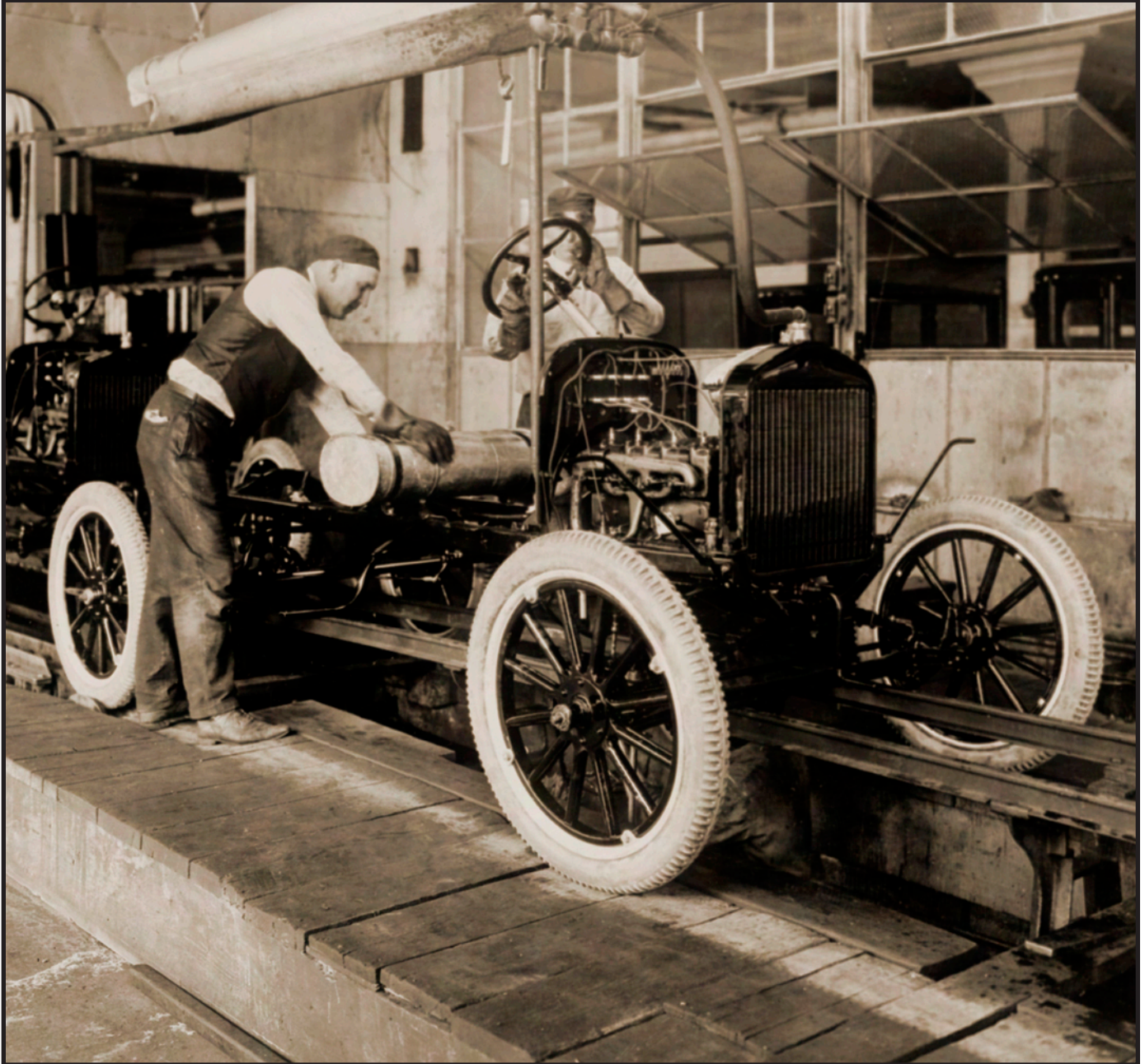
Mass-produced Invention	Natural Resources Required for Production in 1920s	Intended Consequences	Unintended Consequences (including byproducts)	Effects on Natural Systems (good, bad, neutral)
Canned Food and Beverages				
Lightbulb (incandescent)				
Telephone				

## Lesson 2 Activity Master | page 3 of 3

**Directions:** When you have completed the chart, answer the following question. (4 points)

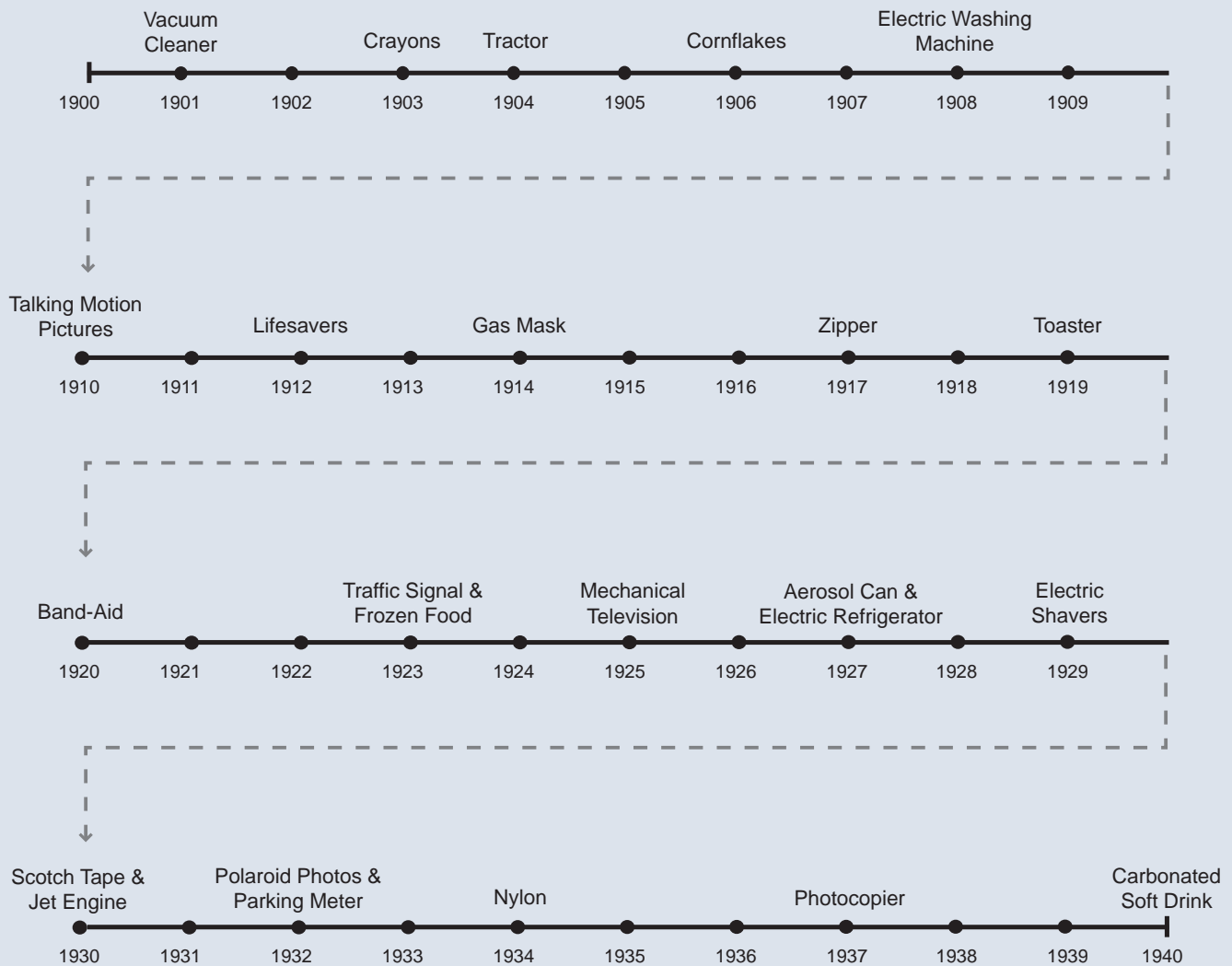
This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

## Ford Assembly Line, 1913





# Inventions Timeline



# Car Ad

*Coast to Coast  
Representation*

## *The Dorris*

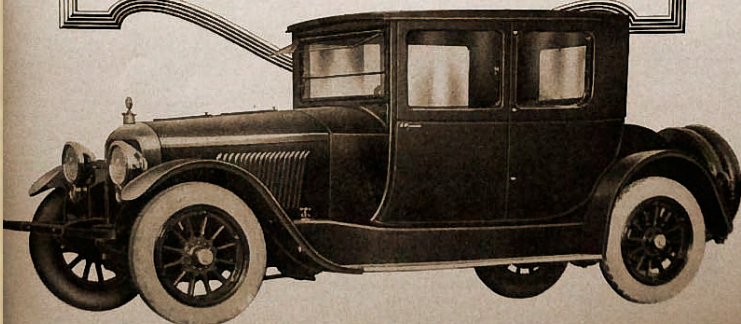
*"Built Up to a Standard, Not Down to a Price"*

Centers of Distribution

EASTERN		
ATLANTA	Brigman Motors Company	Georgia, Alabama, S. Carolina, Florida
BOSTON	Guertin-de Rochemont Co.	New England States, except Connecticut
NEW YORK	Carlson Motors Corporation	Greater New York, Connecticut, Northern New Jersey
PHILADELPHIA	J. Harry Schumacker & Co.	Eastern Pennsylvania, Southern New Jersey, Northern Delaware
CENTRAL		
CHICAGO	Dorris Chicago Company	Northern Illinois
CINCINNATI	The Atlas Motor Car Co.	Southeastern Ohio
COLUMBUS	Fraser-Ogden Motor Car Co.	Southern Ohio, except Cincinnati
FORT WORTH	Elliott, Ray & Bailey	Texas, Louisiana
KANSAS CITY	Stubbs Motor Company	Western Missouri, Kansas
MEMPHIS	West Tennessee Motor Co.	Western Tennessee
OKLAHOMA CITY	Hargrave-Parks Motor Co.	Oklahoma
ST. LOUIS	Weber Implement & Auto Co.	Eastern Missouri, Southern Illinois
WESTERN		
LOS ANGELES	Albert J. Russell	Southern California, Arizona
SAN FRANCISCO	H. A. Sells Company	Northern California

High Grade Distributors and Dealers in open territory should  
investigate Dorris Passenger Cars and Trucks at the Shows

**DORRIS MOTOR CAR CO., ST. LOUIS**



**Directions:** Use the information provided to help you complete **Mass-produced Inventions Chart** (Lesson 2 Activity Master).

### Alarm Clock

Instruments and methods for keeping time are some of the oldest of human inventions. A clock is a modern example of a tool that monitors or tracks



*Alarm clock*

time. In 1876, the Seth Thomas Clock Company received a patent for a new kind of clock, a small bedside alarm clock. Small alarm clocks became popular, and major U.S. clock companies started making them. Manufacturers improved the small clock construction, and by the 1920s, they mass-produced and marketed the clocks as an essential appliance for every home.

The clocks contained a complex system of metal gears, alarm bells, hands, mounting rings, and knobs. A glass lens enclosed the metal hands, which points to printed or painted numbers on a metal face. In the 1920s, clocks were wound using thin metal strands. Today's alarm clocks operate on batteries, electricity, or solar power.

### Camera

Cameras allow people to take photos of objects by working with light. Cameras generally consist of an enclosed hollow with an opening at one end for light to enter. Most cameras have a glass lens positioned in front of the camera's opening to gather the incoming light and focus all or part of the image on a recording surface at the other end of the camera.

The first small, portable camera for photography was built by Johann Zahn in 1685, but it would be almost 150 years before technology caught up to the point where this was practical. Early photographic cameras were similar to Zahn's model, but usually with the addition of sliding boxes for focusing. Before each exposure, the photographer had to insert a sensitized plate in front of the viewing screen to record the image.

In the 1920s, the box camera was popular. These box cameras were mass-produced with inexpensive glass optics and metal covered with leatherette. Leatherette is a kind of imitation leather made of paper, cloth, or plastic. The entire back of the camera opened to insert and remove the film, which was loaded onto a chrome rail and rolled onto a metal screw.



*Camera*



### Canned Food

Canning is a method of preserving food by processing it and sealing it into an airtight container, which is usually metal. The French military first developed this process as a way of protecting food from spoiling. As the canning process was mechanized and urban populations grew throughout Europe, demand for canned food increased. Inventions brought improvements to the process. In 1812, the first U.S. canning factory in New York City used improved tin-plated wrought-iron cans for preserved oysters, meats, fruits, and vegetables. Demand for canned foods increased during wars and skyrocketed during World War I.

Today, tin-coated steel is the material most commonly used for canned foods.



*Canned food*

### Lightbulb

Considered to be one of the most life-changing inventions in human history, the electric lightbulb affects our everyday lives and makes many nighttime activities possible. While earlier experiments in electric lighting are documented, Thomas Alva Edison is credited with the development of the “incandescent lamp,” or lightbulb, in 1879. As electricity became more available in the early 1900s, the demand for and production of lightbulbs increased.

The incandescent lightbulb provides electric light through incandescence, or heat-driven light emissions. An electric current passes through a thin filament—a thread of metal, which is usually tungsten—heating it until it produces light. A glass globe encloses the filament and prevents the oxygen in air from reaching the hot filament, which would destroy it. Incandescent lightbulbs are made of glass, tungsten wire, small wires, and metal sleeves. Low-pressure inert gas, usually argon, neon, or nitrogen, fills the glass globe.

Due to the high energy usage of incandescent lightbulbs, more energy-efficient alternatives have been developed recently, for example, compact

fluorescent lamps and LED lamps. Some governments have passed laws to phase out the use of incandescent lightbulbs. Brazil and Venezuela began to phase them out in 2005. Other nations have scheduled phase-outs: Ireland and Switzerland in 2009, Italy in 2011, Canada in 2012, and the United States between 2012 and 2014. As a result, efforts to improve the efficiency of incandescent lamps are being made. General Electric has announced work on “high efficiency incandescent” (HEI) lamps, which are expected to be four times as efficient as current incandescent lamps.



*Lightbulb*

## Inventions Information Sheet

Lesson 3 Activity Master | page 3 of 3

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### Telephone

Alexander Graham Bell was credited with the invention of the telephone, although many other inventors claimed this invention as their own. Between 1844 and 1877, several versions of a device that transmits and receives sound were created, using various materials to transmit sound. In 1877, Thomas Edison received a patent for his carbon transmitter. He set up the first telephone system, called an exchange, in New Haven, Connecticut, in 1878. In this exchange, people with telephones could communicate through operators working at a switchboard. In 1923, the first rotary dial telephone was developed in France.

As telephone systems and telephones for home use improved, they were mass-produced for



*Telephone*

consumers. Rotary dial telephones manufactured in the 1920s were made of wood or zinc alloy (changed to thermoplastic in 1941), carbon microphones, metal bells and parts, iron, wires, and magnets.





## *Bring Along a Brownie*

Making pictures—that's fun. Looking at them afterwards and showing them to your friends and family—that's still more fun, as you'll find from the first.

And it's all easy with a Brownie.

*Brownie Cameras, \$2.00 up*

Eastman Kodak Company, Rochester, N. Y., *The Kodak City*

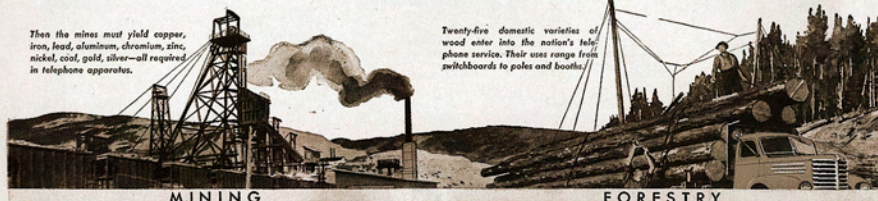


## OUR BIG JOB FOR THE BELL SYSTEM



IMPORTING

FARMING

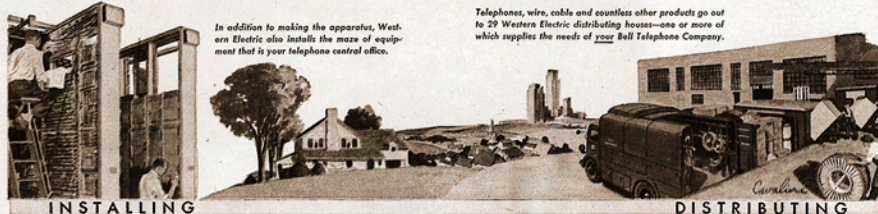


MINING

FORESTRY



MANUFACTURING



INSTALLING

DISTRIBUTING

AS supply unit of the Bell Telephone System, Western Electric has one of industry's most complex jobs.

Today we are working full speed ahead on equipment not only to meet immediate telephone needs, but also to carry out the Bell System's \$2,000,000,000 post-war construction program.

This vast program promises a record in peacetime production at Western Electric—with a level of employment higher than in the years just before the war—and better-than-ever telephone service for you.

### Western Electric

**MANUFACTURER  
PURCHASER  
DISTRIBUTOR**

**INSTALLER of Central Office Equipment  
FOR THE BELL TELEPHONE SYSTEM**

Buy Victory Bonds  
—and keep them!





**Y**OU'LL have to get up early to beat a Westclox alarm. It will get you up any time you say and keep good time all day.

Westclox is a short way of saying Western Clocks. The word, Westclox, is on the dial of every alarm we make. We put it there because we're proud of the quality we build into the clock.

Every Westclox alarm has the same good construction that made Big Ben and Baby Ben so popular.

Folks who become acquainted with Westclox quality look carefully for the word, Westclox, on the dial and tag. It is a mark of good timekeeping.

**Western Clock Co.— makers of Westclox**

La Salle & Peru, Illinois , U.S.A.



**SLICED PINEAPPLE**—Whole, unbroken slices of the finest sun-ripened fruit, from DEL MONTE's own plantations. Comes in four different sizes of cans—No. 2½ (30 oz.); No. 2 (20 oz.); No. 1½ Squat (14 oz.); and No. 1 Flat (9 oz.). One quality, the best, in every can.

**CRUSHED PINEAPPLE**—The same selected fruit as Sliced. Ideal for puddings, punches, ices, etc. Comes in No. 2½, No. 2, and No. 1 Flat tins; also in No. 1 Special (13 oz.) and Buffet (8 oz.) sizes.

Ask for  
**DEL MONTE**  
Coffee, too!  
Super-vacuum  
packed,  
uniformly fresh

Ripened right on the tree—golden, luscious. A great dessert—at surprisingly little cost.

Five tempting DEL MONTE Fruits in a single can. Cut up, ready to serve.

Don't miss them. Just different enough from other fruits to get an instant welcome.

Bartlett's, of course—and what a treat! Flavor such as only the finest trees can produce.

## Is there any NEED for guessing?

... when this quality brand is so easy to get and so reasonable in price!

JUST think *how well*, and how many times DEL MONTE has met your most exacting needs. Think of the great food-producing organization behind it. Think of the millions of women who prefer this label to any other brand.

Think how important it is to us—to *continue* to hold your friendship!

You'll find it pretty hard to discover a single reason for experimenting with any brand that's offered "just as good"!

Especially when DEL MONTE Foods are so reasonable in price! And so easy to get—from any grocer who puts *your* interests first.

★  
*Del Monte Foods*  
FRUITS • VEGETABLES • COFFEE • ETC.



## HOW SEE-ABILITY SPEEDS PRODUCTION



**RUBBER BOATS** made in this plant may save American lives. The operator must cut this rubber fabric accurately and fast. See-ability helps her do this vital job smoothly, exactly, at high speed. Better See-ability is made possible by the efficiency and brightness of today's Westinghouse Mazda Lamps. This See-ability enables the operator to work to closer limits, faster, more accurately. Under See-ability conditions, mistakes are fewer, accidents reduced, materials saved, inspection speeded. And See-ability is welcomed by

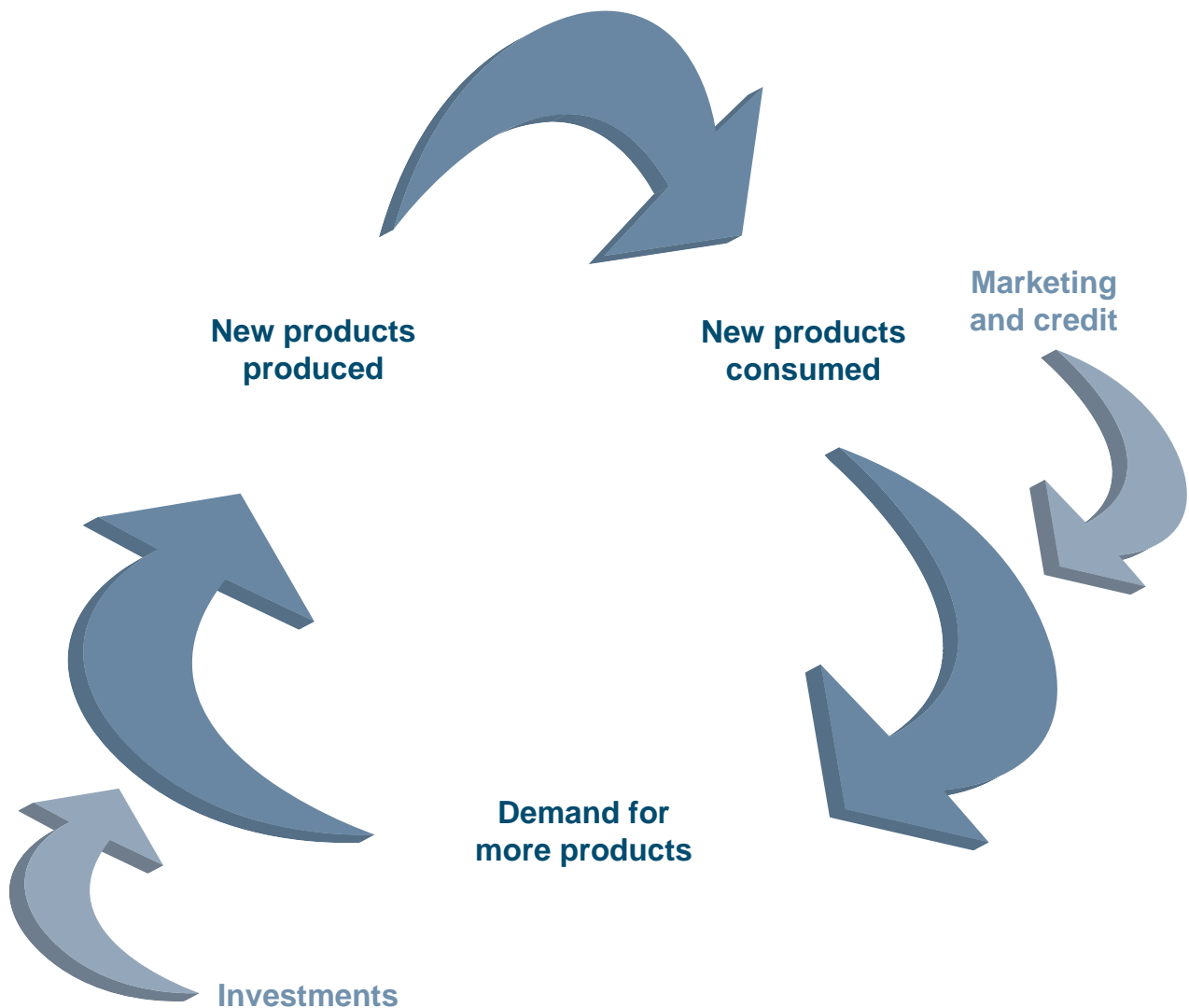
employees, too—for it lessens eyestrain and fatigue. When the big job of war production is done, these higher standards of lighting developed by Westinghouse engineers will be available to everyone—to factories and offices, to stores, hotels, theaters and restaurants, and to private homes. Let your local Westinghouse dealer tell you how bright, long-lasting Westinghouse Mazda Lamps will give you See-ability, or write Westinghouse Electric and Manufacturing Co., Bloomfield, New Jersey. *Plants in 25 cities . . . offices everywhere.*



*Listen to John Charles Thomas, NBC, Sunday, 2:30 P. M., E. W. T.*



## Mass Production and Consumption Cycle



## Advertisement Guiding Questions

- What is the item being advertised?
- What was its intended use or function?
- Who would use this item in the 1920s?
- Who uses this item today? Has the intended use or function changed since the 1920s?
- What natural resources were used to produce this item?
- What was the effect on natural systems to make this item, use this item, and dispose of this item?
- Have the materials used to make this item changed since the 1920s? If so, what has changed and why? Do these changes alter the effects of this item on natural systems?

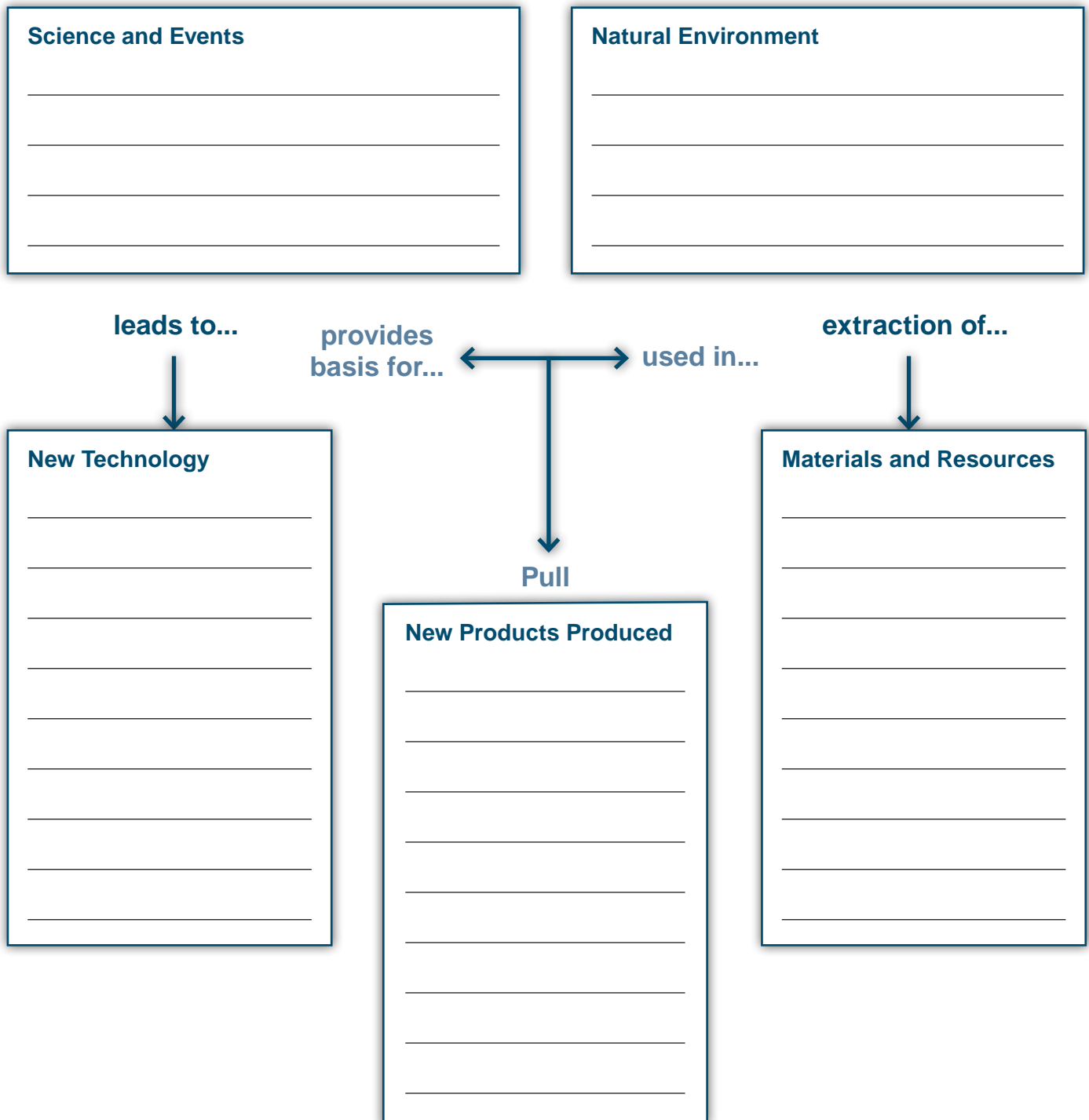
## Mass Production, Marketing, and Consumption in the Roaring Twenties

Lesson 4 Activity Master | page 1 of 4

Name: \_\_\_\_\_

### Part 1

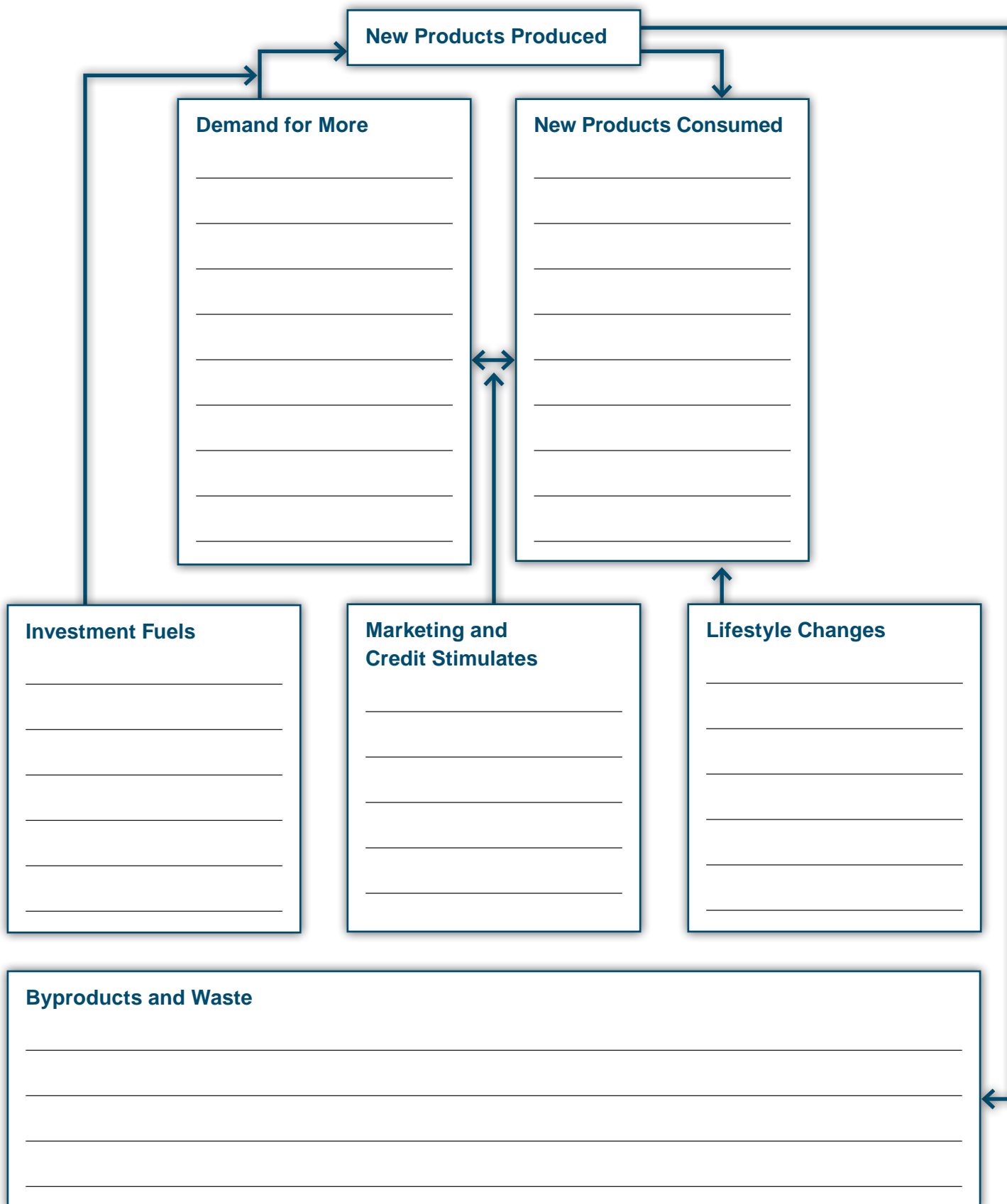
**Directions:** As you listen to the lecture, complete the graphic organizer showing how the cycle of mass production, marketing, and consumption influenced the American landscape and natural systems. You may use **Rise of Mass Production and Mass Consumption** (Lesson 2 Activity Master) to help you.



# Mass Production, Marketing, and Consumption in the Roaring Twenties

Lesson 4 Activity Master | page 2 of 4

Name: \_\_\_\_\_



## Mass Production, Marketing, and Consumption in the Roaring Twenties

Lesson 4 Activity Master | page 3 of 4

Name: \_\_\_\_\_

### Part 2

**Directions:** Use information from class discussions and the graphic organizer to write a brief essay (2–3 paragraphs) describing the direct and indirect influences of the social, economic, and environmental changes of the 1920s on the American landscape. Include the following points in your essay:

- Describe the American landscape prior to 1920.
- Describe influences and features from the growing cities and human social systems that developed in the 1920s.
- Explain how the features from human social systems directly and indirectly influenced the American landscape and natural systems.

Use the **Mass Production, Marketing, and Consumption in the Roaring Twenties Scoring Tool** to guide your writing.

### Mass Production, Marketing, and Consumption in the Roaring Twenties Scoring Tool

20	Describes several features from natural systems (mountains, rivers, fields, plains); describes influences and features from the growing cities and human social systems that developed in the 1920s (highways, filling stations, roadside restaurants or motels, factories, cars, trucks, cranes, electricity poles/lines, mines, dumps); explains how the features from human social systems directly and indirectly influenced the American landscape and natural systems.
15	Describes one or two features from natural systems; describes one or two influences and features from human social systems that developed in the 1920s; describes how the features from human social systems directly and indirectly influenced the American landscape and natural systems.
10	Identifies a feature from a natural system and a feature from human social systems that developed in the 1920s; describes how the feature from human social systems influenced the American landscape and/or natural systems.
5	Identifies a feature from a natural system or a feature from human social systems that developed in the 1920s.



Mass Production, Marketing, and Consumption in the Roaring Twenties

Name: \_\_\_\_\_

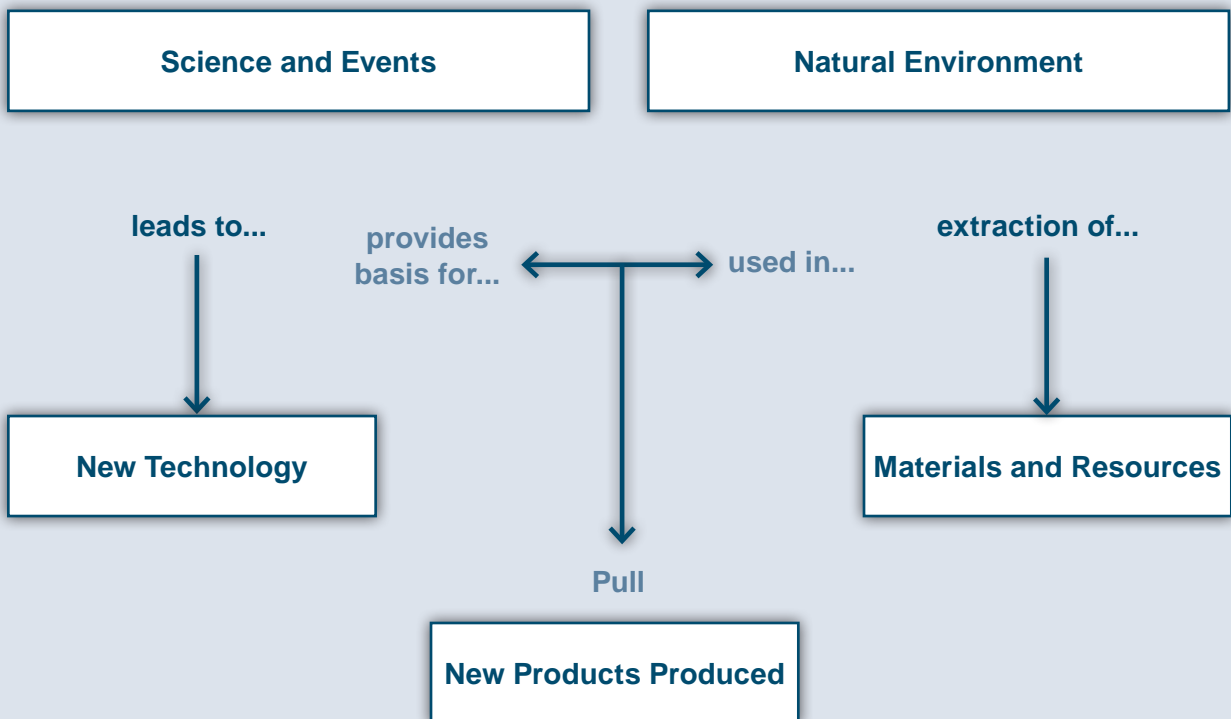
Lined area for student response.



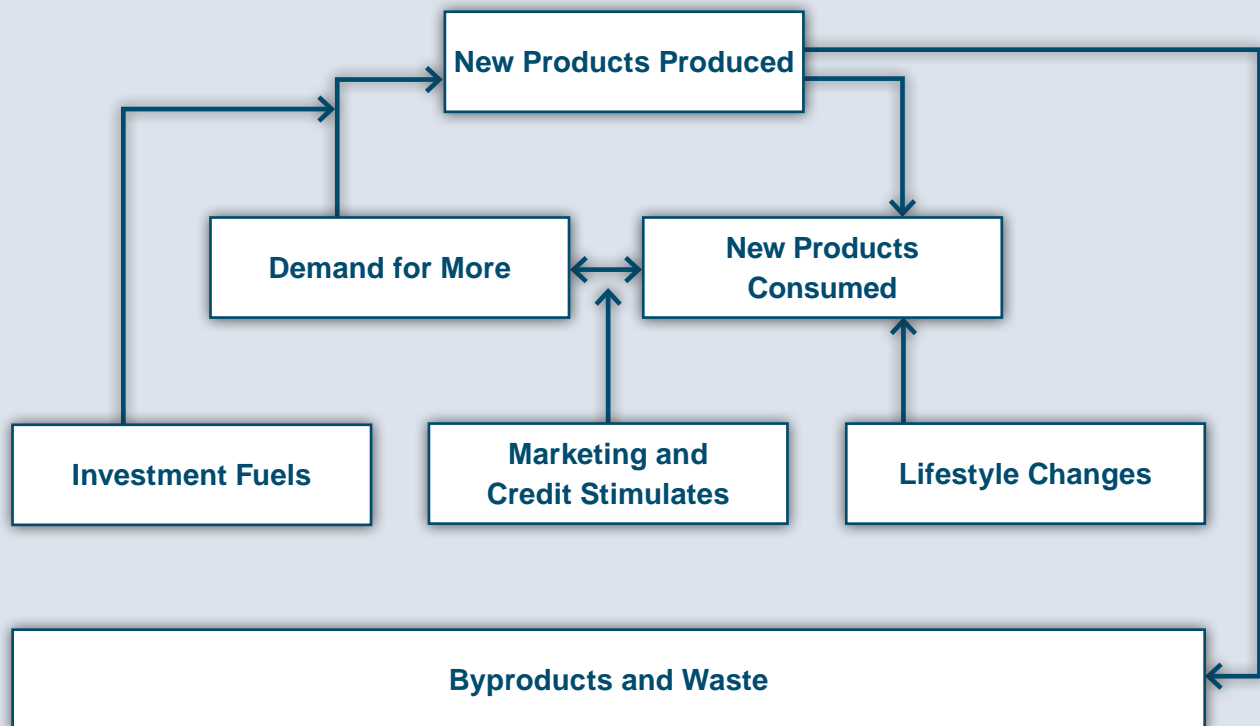




## Mass Production, Marketing, and Consumption in the Roaring Twenties



## Mass Production, Marketing, and Consumption in the Roaring Twenties



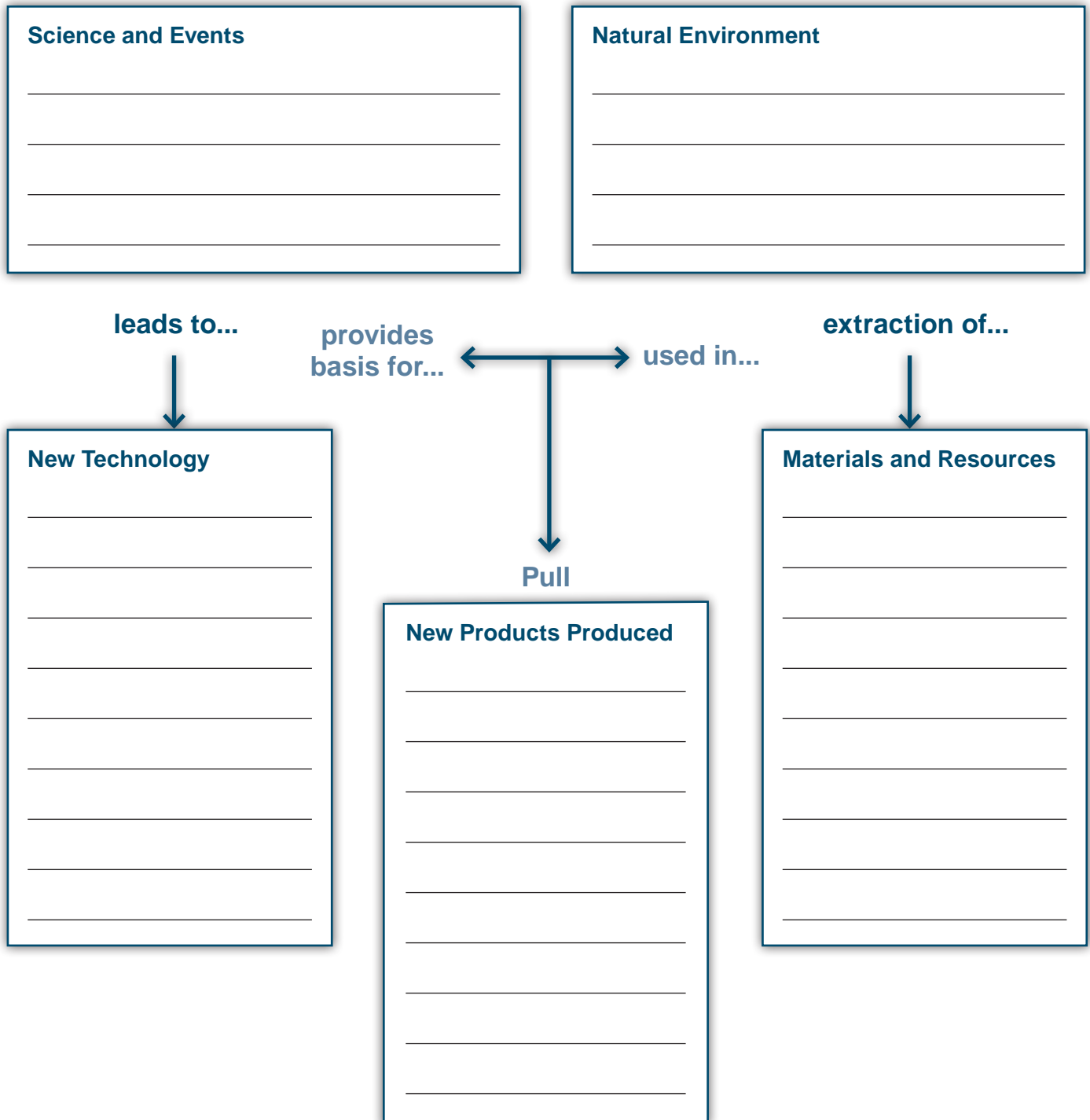
## Mass Production, Marketing, and Consumption of Plastic Shopping Bags

Lesson 5 Activity Master | page 1 of 3

Name: \_\_\_\_\_

### Part 1

**Directions:** Complete the graphic organizers below to show the cycle of mass production, marketing, and consumption of plastic shopping bags. (2 points each box on both concept maps)

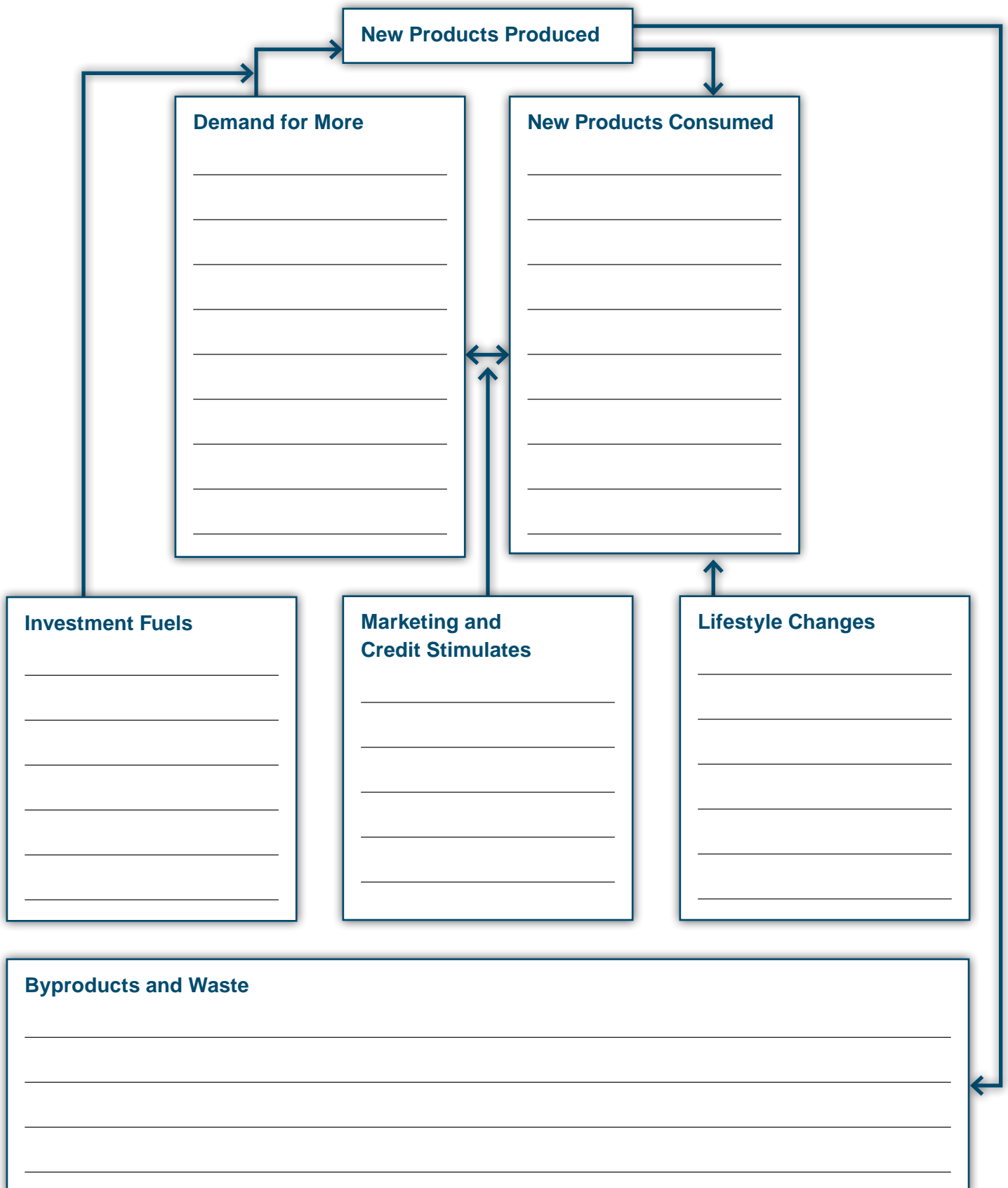




# Mass Production, Marketing, and Consumption of Plastic Shopping Bags

Lesson 5 Activity Master | page 2 of 3

Name: \_\_\_\_\_



Mass Production, Marketing, and Consumption of Plastic Shopping Bags

Name: \_\_\_\_\_

Part 2

**Directions:** Discuss each question with your partner or group, and write your answer.

1. How does the production of plastic shopping bags affect natural systems? (4 points)

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2. What might be done to change the cycle of mass production, marketing, and consumption of plastic bags? (4 points)

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3. What can the government do to manage concerns about plastic bags via regulation, incentives, and/or new technologies? (4 points)

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## White Pollution in Beijing





## Plastic Bag or Jellyfish?





## Pacific Garbage Patch

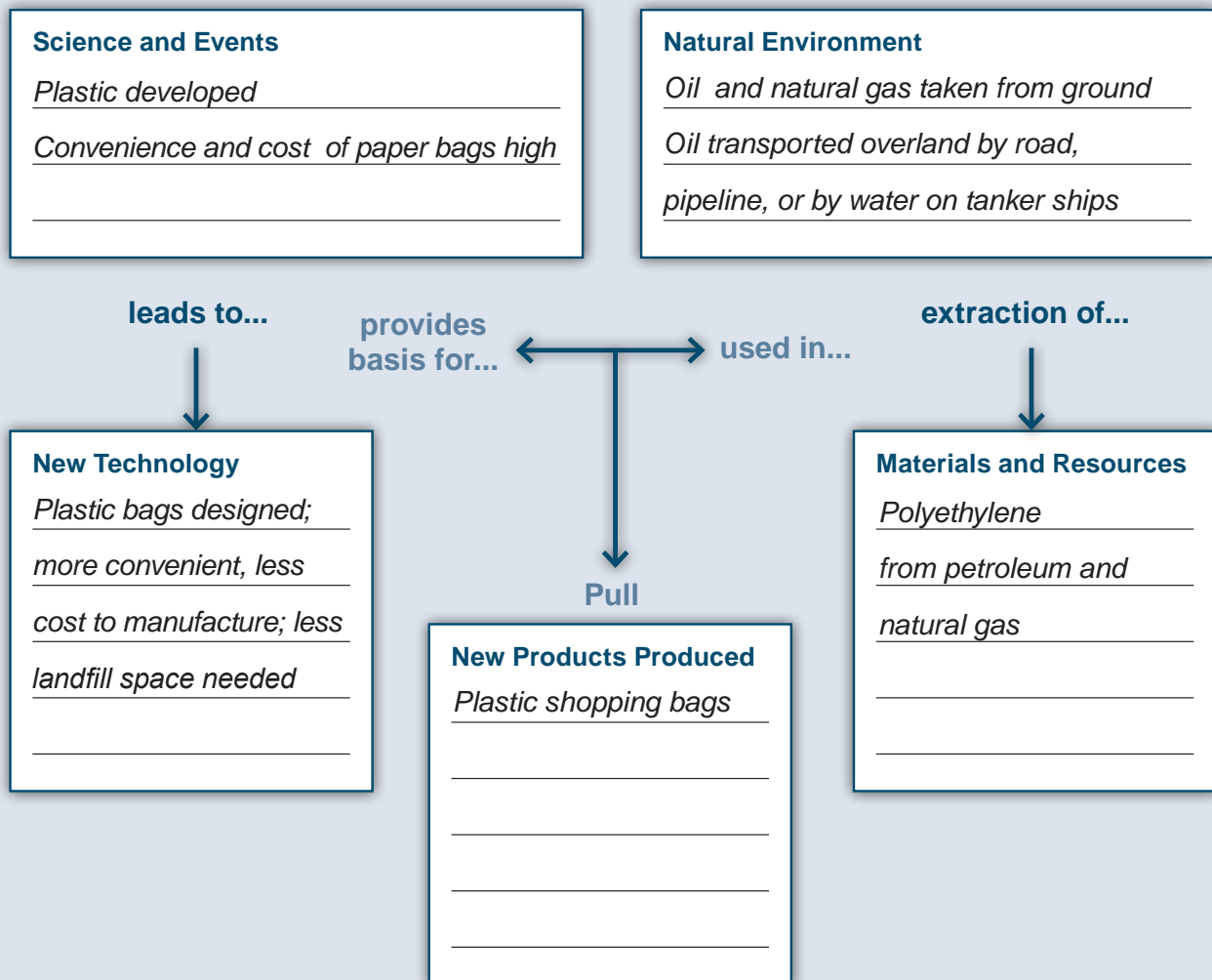




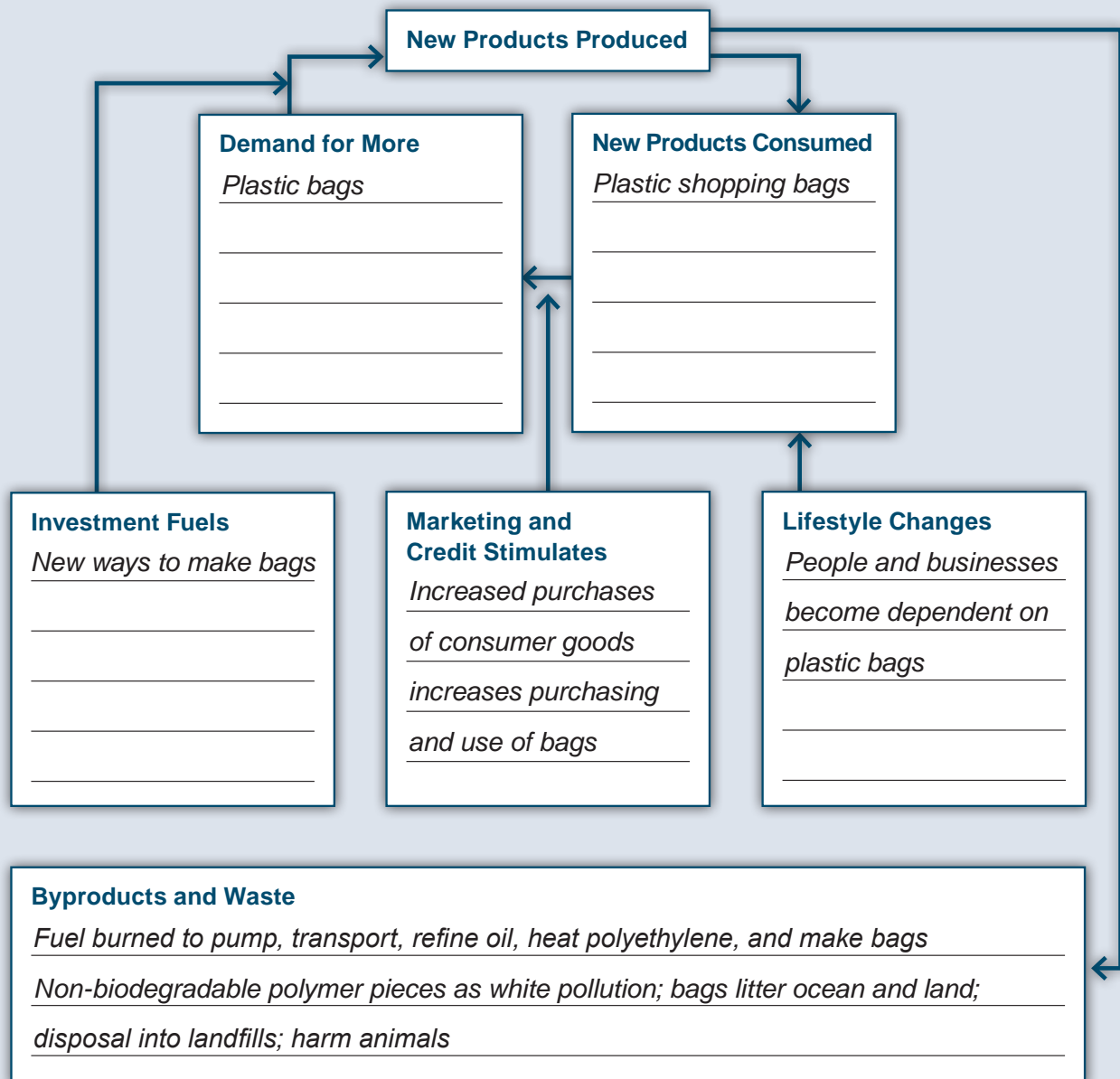
## White Pollution in the Marine Environment



## Mass Production, Marketing, and Consumption of Plastic Shopping Bags Answer Key



## Mass Production, Marketing, and Consumption of Plastic Shopping Bags Answer Key





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Printing	Robinson Anderson Print & Fulfillment Services, Sacramento, California
Original Design	Karol A. Keane, Design & Communications, Inc./National Geographic Society

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## California Education and the Environment Initiative

